

# DEPARTMENT OF HUMAN RESOURCES

# Study Guide Automotive Attendant Written Examination

■ This booklet contains SAMPLE QUESTIONS ONLY. Studying this booklet will not necessarily improve your exam score.

# PURPOSE AND CONTENT OF THIS STUDY GUIDE

This guide was developed to help you prepare to take the written examination for Automotive Attendant. It contains general test-taking advice and also provides specific information related to the exam content. This information includes the subject areas covered by the exam, the kinds of questions to expect, strategies for approaching the questions, and sample questions. Though this information cannot guarantee a higher examination score, it can give you direction for your examination preparation that will assist you in doing your best.

#### PREPARING TO TAKE THE EXAMINATION

# Before the Day of the Exam

- Review this guide to get familiar with the content of the exam. Knowing about the topics and kinds of questions that will be in the exam will ensure that you will not be surprised by the content of the exam or the manner in which it is presented. This can improve your ability to demonstrate your job potential.
- Make sure that you know where the exam will be administered and all of the relevant details, such as where to park, where to report for the exam, and what identification is required.

# On the Day of the Exam

- Make sure that you are well rested and have eaten. These things will help your concentration during the exam.
- Plan your day to allow plenty of time to get yourself prepared and get to the exam site. Allow enough time to cope with weather, traffic, parking, etc. Hurrying creates anxiety, so do not put yourself in the position of having to hurry.
- Listen carefully to all instructions from the examination administrator. Make sure that you understand the instructions and carry them out correctly. Ask questions at the proper time before the exam begins if you are unsure of any aspect of what you should do during the exam.

#### **GENERAL EXAM TAKING TIPS**

- Use your time carefully. The time limit should provide you with more than enough time if you move through the exam steadily and do not spend too much time on any one question.
- Read the questions and answer choices carefully. Read all of the answer choices before you select an answer.
- If you come to a question that is especially difficult, skip that question and come back to it later if you have time.
- Answer every question. Scores are based on the number of correct answers. You will receive no credit if you leave an answer space blank. It is to your advantage to use your best judgment to make a choice among the answer choices provided.

# THE AUTOMOTIVE ATTENDANT WRITTEN EXAMINATION

The written examination for Automotive Attendant is based upon a job study that identified the most important knowledge, skills, and abilities required to perform the job successfully. These areas include:

- your knowledge of automotive care and maintenance concepts.
- your knowledge of tools and equipment used in automotive care and maintenance.
- your skill in interpreting information and solving problems related to interacting with customers and automotive care and maintenance.

All of the exam questions are presented in a multiple-choice format. Each question is identified by a question number that is followed by a question statement. Unless indicated otherwise, there are between two and four answer choices following the question statement. You should read all of the answer choices and then choose the best answer. **Each question has only one correct answer.** 

# **SECTION 1: BASIC MAINTENANCE**

This test section contains twenty (20) questions designed to assess your knowledge of automotive care and maintenance. Questions will focus on tools and techniques required to safely and correctly maintain vehicle components such as tires, brakes, cooling systems, transmissions, air systems, and interiors. Questions will not address more advanced mechanical concepts such as engine, body, electrical system, or computer system repair. The best way to prepare for the questions in this part of the examination is to review information on how to perform automotive maintenance tasks which can be found in reference manuals, books at your local library, and online resources.

Examples of these types of questions are shown below. Each question is followed by a brief explanation of the correct answer.

- 1. When checking the oil in a vehicle, it is important to note the color of the fluid, which should be which of the following?
  - A. Black.
  - B. Amber or yellow.
  - C. Light to medium gray.
  - D. Dark brown or coffee colored.

**Answer:** The correct answer to sample question #1 is response choice "B". It is important to know the types of fluids used in vehicles, how they should appear, and what differences might indicate. Oil should be an amber or yellow color. Darker colors indicate the presence of contaminants or sludge or exposure to excessive heat.

- 2. Over inflation of tires is most likely to cause which of the following?
  - A. Cracking.
  - B. Reduced load capacity.
  - C. Excessive sidewall flexing.
  - D. Increased potential for impact damage.

**Answer:** The correct answer to sample question #2 is response choice "D". An over inflated tire is stiff and unyielding which makes it more susceptible to impact damage when running over potholes or road debris. The other response choices are potential effects of under inflation which prevents a tire from maintaining its shape.

- 3. Circular patterns of bolts such as the lug nuts on wheels should be tightened:
  - A. in a crisscross patten.
  - B. following clockwise pattern.
  - C. following a counter-clockwise pattern.
  - D. in any manner that is preferred by the person doing the work.

**Answer:** The correct answer to sample question #3 is response choice "A". Whenever there are more than two fasteners securing a part, it is important to alternate the tightening among them in a crisscross pattern in order to apply more uniform force.

- 4. Which of the following is recommended when cleaning antifreeze that has spilled onto the shop floor?
  - A. Mop up the spill with rags.
  - B. Thoroughly hose down the area.
  - C. Wear rubber gloves during the removal process.
  - D. Wear a face mask or other respiratory protection.

**Answer:** The correct answer to sample question #4 is response choice "C". It is important to know safety procedures for working in an automotive environment. Antifreeze is identified by the Environmental Protection Agency as a substance that can be absorbed through the skin and cause damage to internal organs. Therefore, it is recommended that rubber gloves be worn when cleaning a spill. The correct procedure is to first cover the spill with sand to absorb the fluid and then scoop the sand for safe disposal.

# **SECTION 2: TOOLS AND EQUIPMENT**

This examination section contains twenty (20) questions designed to assess your knowledge of how to safely use tools and equipment required to perform automotive maintenance tasks such as wrenches, sockets, jacks, drills, and compressed air tools. The best way to prepare for questions of this type is to review information on tools and equipment used to perform automotive maintenance tasks which can be found in reference manuals, books at your local library, and online resources.

Examples of the types of questions in this examination section are shown below. Each question is followed by a brief explanation of the correct answer.

- 5. After using a torque wrench, it is most important to do which of the following?
  - A. Apply a degreasing agent.
  - B. Wash the tool with soap and water.
  - C. Return the micrometer scale to zero.
  - D. Clean the tool using compressed air.

**Answer:** The correct answer to sample question #5 is response choice "C". Resetting the scale to zero will help to maintain the tool's calibration.

- 6. When using a floor jack to raise a vehicle, which of the following is recommended?
  - A. Always use both wheel chocks and jack stands.
  - B. No additional equipment is needed other than properly placed jack stands.
  - C. Use wheel chocks only if the rear of the vehicle is the area that has been lifted.
  - D. Both wheel chocks and jack stands are necessary only if the vehicle is being raised on an uneven surface.

**Answer:** The correct answer to sample question #6 is response choice "A". Maintaining safety is always a primary concern. Any operations that involve lifting and working under a vehicle pose great risk and, therefore, also require maximum safety precautions. The wheel chocks prevent any unintentional rolling which helps to ensure the stability of the jack stands.

- 7. The greatest drawback of using an adjustable wrench for performing automotive maintenance work is that it may <u>not</u>:
  - A. have enough grip.
  - B. provide sufficient strength.
  - C. fit well in constricted areas.
  - D. allow for sufficient precision.

**Answer:** The correct answer to sample question #7 is response choice "C". It is important to understand the characteristics and uses of tools used in automotive repair. The adjustable wrench has a thick head which may make it difficult to use in the constricted areas within an engine compartment.

# **SECTION 3: PROBLEM SOLVING**

This part of the examination contains twenty (20) questions that assess your skill in performing problem solving tasks related to automotive repair work. Such problem solving includes resolving customer problems, interpreting information from manuals and charts, and performing basic calculations.

Some questions will describe a situation and then ask you to select the most effective response given the circumstances. For this type of question, it is important to focus on the objective, the situation and the role of an Automotive Attendant. For example, for questions that involve customer problems, you should visualize the situation, consider what the ideal outcome might be, and think about how each of the suggested actions might influence the outcome.

Some questions will provide you with information similar to that which is used on the job such as safety rules, repair manuals, and maintenance charts. You will be asked to review the information and then answer questions using the information.

A good strategy to use for this type of question is to read through the entire chart or passage, then read each of the questions, and finally refer back to the information as you answer each question. When reading each question, determine what information the question is specifically looking for by giving careful consideration to each of the words used to convey meaning. For example, does the question ask about a cause or effect? Does it ask you to identify the correct method or sequence for performing tasks?

It is important that you select your answers solely based upon the information provided. The test questions are designed to assess your ability to correctly interpret what is provided, not to assess your knowledge of the subject area addressed by the reading passage.

Some questions will require you to perform basic calculations such as addition, subtraction, and multiplication which is used on the job for tasks such as calculating mileage and determining the correct amount of fluid to add to reach specified capacities. For these questions, it is most important that you are certain you understand exactly what is being asked and double check your work.

Examples of the types of questions in this exam section are shown below. Each question is followed by a brief explanation of the correct answer.

- 8. A customer who is upset that his vehicle will not be ready when he expected it to be has angrily suggested that the reason for the delay is due to lack of skill on the part of shop employees. In this situation, it is most important to:
  - A. avoid becoming defensive.
  - B. demonstrate why the comment is untrue.
  - C. directly address the inappropriateness of the comment.
  - D. avoid conveying any sense of urgency with regard to the problem.

**Answer:** The correct answer to sample question #8 is response choice "A". In a customer service situation, the goal is to resolve the problem and maintain working relationships. Reacting to an insensitive comment by becoming defensive will detract from these objectives by taking the focus away from the problem and placing it on emotions. This, in turn, will tend to escalate conflict rather than defuse it.

**Instructions:** Use the information below to answer the question that follows.

**Timing Belt Specification Chart** 

Timing Boil opposition official			
Туре	Pitch	Tooth Height	Thickness
MR	8.00	3.62	4.50
MY	8.00	4.10	5.30
SM1	9.00	4.10	5.70
SM2	9.00	4.50	5.30
ZA	9.53	4.62	5.10
ZB	9.53	4.50	5.70

- 9. Based on the information shown in the chart, what type of timing belt should you select if your specifications indicate that a vehicle requires a timing belt that has a tooth height of 4.10 and a thickness of 5.30?
  - A. MR
  - B. MY
  - C. SM1
  - D. ZA

**Answer:** The correct answer to sample question #9 is response choice "B". Information related to vehicles such as part numbers, tire pressure recommendations, and fluid levels is often provided in charts, so it is important to be able to interpret them correctly. In this case, the answer is found by first looking for the correct number in the Tooth Height column (4.10). Since there are two matches, you must then look to the right at the Thickness column. There you will see that the second row shows the specified thickness of 5.30. Following the row to the far left column then shows the correct timing belt type which is designated as MY as shown in response choice B.

- 10. It is recommended that the oil in a certain vehicle be changed every 8,500 miles. If the oil has just been changed and the odometer currently reads 45,763 miles, at what mileage reading should the next oil change be made?
  - A. 53.163 miles.
  - B. 53,263 miles.
  - C. 54,163 miles.
  - D. 54,263 miles.

**Answer:** The correct answer to sample question #10 is response choice "D". This question requires adding the number of miles allowed between changes (8,500) to the existing mileage reading (45,763). In setting up this addition, it is important that you align the numbers properly so that ones, tens, hundreds, and thousands are in alignment. This will help prevent errors. It is also important to make sure that you carry numbers to the left when the addition of two numbers exceeds ten as is the case with the numbers in the hundreds and thousands places.

**Instructions:** Use the information below to answer the question that follows.

# **Dust Hazards in Repair Shops**

Dust resulting from repair shop operations may present health hazards to workers and create a potential fire risk. Given this, it is important to use proper personal protective equipment and workplace hygiene practices. Dust particles can accumulate or remain suspended in the air long after their production has ceased and can become re-suspended through improper cleaning efforts. Workers should have access to and use masks, goggles, face shields or respirators as recommended for operations that create exposure to dust particles. Workers should also adhere to a regular cleaning routine that includes vacuuming or wet mopping rather than sweeping.

- 11. According to the information provided, which of the following worker behaviors can increase the risks associated with dust in a repair shop?
  - A. Doing work that creates dust particles.
  - B. Using a broom to clean up dust and debris.
  - C. Not using proper tools to perform repair tasks.
  - D. Only using one form of personal protective equipment.

**Answer:** The correct answer to sample question #11 is response choice "B". The third sentence in the reading passage indicates that dust particles can be "resuspended through improper cleaning efforts". In the last sentence of the reading passage, the recommendation is made to avoid sweeping as a method for cleaning. Therefore, the passage identifies a risk (making the dust airborne again) and how it occurs (sweeping) as is described in response choice "B".

#### ADDITIONAL ASSISTANCE

If you feel that you would benefit from more practice, your local library or relevant internet web sites may have reference materials that can be helpful. This is true for all of the subject areas covered by the Automotive Attendant written examination.